Amendments to the Claims

1-21. Canceled.

22. (New) An antenna system for receiving diversity signals from a single antenna, comprising:

a single antenna (330) for connection a receiver (350) by an inner conductor and an outer conductor (340) of a coax cable (335);

a device (380) for differential extraction of a first diversity signal (376a) across said inner conductor and outer conductor (340) at a near end of said coax cable (335) in a differential mode; and

a device (381) for single-end extraction of a second diversity signal (376b) from the coax cable (340) in a common mode;

wherein are provided said first and second diversity signals (376a and 376b) for improved reception of truly spatially diverse communications signals (325a and 325b) from a transmitter (320) by receiver (350).

23. (New) The antenna system of Claim 22, further comprising:

a first transformer (380) with its primary windings connected across said inner conductor and outer conductor (340) at a near end of said coax cable (335), and its secondary windings providing an output for said first diversity signal (376a) to a first receiver input load (360); and

a second transformer (380) with its primary windings connected to said outer conductor (340) at a near end of said coax cable (335), and a local ground, and its secondary windings providing an output for said second diversity signal (376b) to a second receiver input load (361);

wherein, said primary windings of the first and second transformers (380 and 381) are stacked in series with each other.

24. (New) A method for obtaining two diversity signals (376a and 376b) from a single antenna (330) and coax cable (335), comprising:

connecting a single antenna (330) to a receiver (350) by an inner conductor and an outer conductor (340) of a coax cable (335);

differentially extracting a first diversity signal (376a) across said inner conductor and outer conductor (340) at a near end of said coax cable (335); and

single-endedly extracting a second diversity signal (376b) from the coax cable (340) with reference to a local ground at a receiver input;

wherein are provided said first and second diversity signals (376a and 376b) for improved reception of truly spatially diverse communications signals (325a and 325b) from a transmitter (320) by receiver (350).